May 30, 2007
733 North Second Street
San Jose, CA 95112

Jared Hart
200 E. Santa Clara Street
San José, CA 95113

Subject: Impacts on Surrounding Serpentine Grassland Due to Nitrogen Deposition

Dear Mr. Hart:

After reviewing the Coyote Valley Specific Plan (CVSP) Draft Environmental Impact Report (DEIR), I am concerned that mitigation identified for significant impact to surrounding serpentine grassland is inadequate.

Serpentine grassland (present at Coyote Ridge and other nearby locations in the Santa Cruz Mountains and the Mt. Hamilton range) is recognized by both California Department of Fish and Game and U.S. Fish and Wildlife Service as a sensitive natural community. Serpentine grassland's chemical properties make it suitable for serpentine-endemic and serpentine-tolerant plants, which are predominantly native plants, and unfavorable for invasive non-native plants. The tracts of serpentine grassland surrounding Coyote Valley are critical habitat for the endangered Bay checkerspot butterfly which depends on serpentine endemic species for several stages in its lifecycle, as well as habitat for several listed plant species.

If the CVSP is approved and Coyote Valley is built out, the DEIR predicts that automobile traffic will increase significantly and air pollution levels will correspondingly increase. In fact, some significant and unavoidable (because unmitigable) traffic and air pollution impacts have been identified, namely TRAN-16, TRAN-25, TRAN-26, AQ-3, and AQ-6. The DEIR recognizes that increased automobile traffic and the attendant increase in automobile exhaust, as well as possible increases in industrial and non-industrial air pollutants, would result in increased nitrogen deposition on surrounding soils in serpentine grasslands, resulting in changed soil chemistry and changed species diversity.

The changed soil chemistry favors non-native annual grasses over native serpentine-endemic and serpentine-tolerant plants, thus threatening these species, some of which are listed. The DEIR recognizes that this increase in nitrogen deposition would be a significant indirect impact on surrounding serpentine grassland (p.286), and states that it could be mitigated to a less than significant level.

The mitigation as proposed is inadequate, however, and very likely would not lower the impact to less than significant. The mitigation would establish a "serpentine grassland preserve;" management of that preserve would "focus on alleviating potential effects of increased nitrogen deposition" (Appendix G p.68). This proposal raises several concerns.

- What strategy should be followed to "alleviate" the effects of nitrogen deposition? Neither the Biological Resources Report nor the Biological Resources section of the DEIR proposes an approach or refers to an approach established in the literature. Managed grazing is an approach whose effectiveness is broadly recognized. However, its effectiveness over a long period of time is not established. This mitigation does not clearly lead to lessening of the impact. Clearly, additional

research and a stronger scientific basis are required to determine how to make such mitigation effective.

- If restoration is to become part of the management plan, it must be recognized that sensitive natural communities are notably difficult to restore because of "site-specific edaphic (soil composition) requirements, the lengthy period required to achieve maturity," and the experimental nature of methods of restoration.[1] Success of restoration is thus uncertain and cannot be guaranteed to diminish the impact.

- Where would this serpentine grassland preserve be located? The DEIR proposes that it be adjacent to the Coyote Valley development (p.292). If this is the case, however, the new preserve would be as vulnerable to increased nitrogen deposition as is the surrounding serpentine grassland—which the DEIR has identified as being impacted by the proposed project. This mitigation may increase the amount of serpentine grassland that is preserved from development, but it would not protect either the impacted grassland nor the new preserve grassland from nitrogen deposition—the very impact that the mitigation is designed to address.

- If, on the other hand, the serpentine grassland preserve is located elsewhere, away from air quality impacts of the Coyote Valley development, this would be implicit acknowledgment that nitrogen deposition cannot be directly counteracted, and that thus these tracts of sensitive serpentine grassland would be seriously damaged. The existing preserves on Coyote Ridge that have been established as mitigation for the Kirby Canyon Landfill and Santa Clara Valley Transportation Authority actions would be undermined. Their potential usefulness as preserve areas in the Santa Clara Valley Habitat Conservation Plan (in development) would be negated.

I urge you to develop mitigation that will address the problem of nitrogen deposition as a result of increased automobile traffic. Reducing the significant and unavoidable traffic and air quality impacts, or else sponsoring research on how to alleviate the effects of nitrogen deposition could form a starting point. Urbanization and residential development in this area are likely—unless the entire area is protected as an agricultural, biological, or other preserve—so a solution is needed, whether for the proposed project or for a future alternative project.

Thank you for your attention.

Sincerely,

Diana C. Roberts

[1] http://www.ceres.ca.gov/planning/genplan/sutter/natural9.html.